

PROJECT PROFILE

ON

DESICCATED COCONUT (RURAL WOMEN SHG ONLY)

Month & Year
Aug 2010

**PREPARED BY
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Supported by

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DESICCATED COCONUT (RURAL WOMEN SHG ONLY)

1. Introduction

Desiccated coconut is used commonly in sweetmeat preparations, as toppings in desserts, ice creams, puddings, etc., as a filler in betel leaves and a variety of products. The present production of desiccated coconut is around 5600 tonnes per annum and is concentrated in Karnataka where a number of small units are located. The present production is absorbed by the food processing industries for various end uses. Market surveys have shown that desiccated coconut powder in consumer packs is widely accepted by the middle class segments in preference to raw nuts.

2. Market

The major market outlets are the “A” and “B” class stores. The product also finds placement in self service counters and departmental stores. Bakeries buy desiccated coconut in bulk quantities for use in different products.

3. Packaging

Desiccated coconut is packed in laminated foil or polyester-poly pouches in weights of 50 grams, 100 grams, 250 grams, 500 grams and 1 kg.

4. Production capacity

- The plant will be in operation for two shifts a day.
- The plant will operate to a processing capacity to crack 250 nuts per shift or 500 nuts per day.
- The yield of desiccated coconut will be 50 kilograms per day.
- The production of desiccated coconut powder per month will be 1250 kilograms and that per annum would be 15 metric tonnes.
- The time period required for achieving full capacity utilisation is one year.

5. Sales revenue

- With an ex-factory selling price at Rs. 240 per kilogram, the total sales revenue will be Rs. 36.00 lakhs. MRP is fixed at Rs. 300 per kilogram.

- In addition, 12500 litres of coconut milk would yield Rs. 5.00 lakhs, fibre - Rs. 0.50 lakhs, and coconut shell - Rs. 2.50 lakhs, making the total sales revenue to Rs. 44.00 lakhs.

6. Production process outline.

Mature coconuts are taken. They are shredded and the fibre removed. The nuts are cracked into two halves manually. The kernel is grated manually into a fine mesh. The kernel gratings are blanched in hot water, milk extracted and dried in a fluidized bed drier at 50 to 55 degrees centigrade for 8 to 10 hours.

The coconut husk is used for the manufacture of ropes and is also used as a fuel.

The coconut milk is concentrated in the jacketed vessel to yield coconut cream. The shell can be used for manufacture of shell powder and activated carbon.

7. Quality specifications

- The desiccated coconut powder should be free from mold and fungal growth.
- It should test negative for coliforms, streptococci and salmonella bacteria.

8. Pollution control measures

Not necessary as there are no pollutants or effluents. However, the peel and seeds of fruits processed have to be disposed off carefully failing which it could pollute the surrounding areas on fermentation, yielding a foul odour.

9. Energy conservation measures

Common measures will do.

10. Land and construction cost for the proposed unit

The unit is proposed to be set up in a leased area.

The processing area required is 2000 square feet as detailed below:

SI	Description	Sq. feet
1	Processing area	500
2	Raw material store	200
3	Packing material store	200
4	Finished goods store	200
5	Laboratory space	200
6	Baby boiler area	200
7	Machinery spares room	100
8	Administration office	100
9	Toilet space	200
10	Miscellaneous space	100
11	Total	2000

Lease rent – Rs. 5.00 per square foot

Total rent per month – Rs. 10000

Lease advance – Rs. 50000

11. Costing of machinery and equipment

SI	Description	Rs. lakhs
1	Tools for nut cracking	0.060
2	Coconut milk extractor	0.350
3	Steam jacketed kettle	0.333
4	Baby boiler and accessories	1.250
5	Fluidized bed drier	5.000
6	Total cost of machinery	6.993
7	Laboratory equipment	0.500
8	Grand total machinery and equipment	7.493

12. Project cost

SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	6.993
4	Laboratory equipment	0.500
5	Transport vehicle (1 Tata ace)	3.760
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.100
9	Cost of electrification	0.250
10	Erection and commissioning	0.375
11	Cost of machinery spares	0.100
12	Cost of office equipment	1.000
13	Deposits if any	0.400
14	Company formation expenses	0.100
15	Gestation period expenses	0.500
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	2.000
18	Contingencies	0.250
19	Working capital margin money	0.500
20	Total	16.928

13. Working capital requirements per month

a. Salaries and wages

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Supervisor	1	0.100
2	Chemist	1	0.080
3	Skilled workers	1	0.050
4	Unskilled workers	3	0.150
5	Packing workers (female)	3	0.060
6	Administrative staff	1	0.080
7	Driver	1	0.050
8	Total	11	0.570

b. Raw material requirement per month

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Coconuts	12625	5.00	0.631
2	Total raw material	12625		0.631

c. Packaging material requirement per month

SI	Description	Qty	Rate / unit (Rs)	Value (Rs. lakhs)
1	Packaging material – poly propylene pouches	12500 nos	0.50	0.063
2	Primary cartons	12500 nos	1.50	0.187
3	Cartons and straps	630 nos	40	0.252
4	Total			0.502

Total raw + packaging material – Rs. 1.133 lakhs

d. Utilities per month

SI	Description	Rs. lakhs
1	Power 6000 kwh @ Rs. 5.50 per unit	0.330
2	Water	0.050
3	Boiler fuel	0.100
4	Total utilities	0.480

e. Contingent expenses per month

SI	Description	Rs. lakhs
1	Rent for processing shed	0.100
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.071
6	Local transports, loading and unloading	0.100
7	Advertisement and publicity @ 10% of sales	0.366
8	Insurance	0.005
9	Sales expenses @ 1% of sales	0.036
10	Miscellaneous expenses @ 1% of sales	0.036
11	Trade incentives @ 2% of sales	0.072
12	Taxes @ 4%	0.144

13	Total contingent expenses	1.010
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f. Total working capital requirement per month

SI	Description	Rs. lakhs
1	Salaries and wages	0.570
2	Raw material and packaging material	1.133
3	Utilities	0.480
4	Contingent expenses	1.010
5	Total	3.193

14. Means of finance

SI	Description	Rs. lakhs
1	Total Project Cost	16.928
2	Equity	5.643
3	Debt	11.285
4	Working capital margin money	0.500

15. Financial analysis

SI	Description	Rs. lakhs
1	Total recurring cost per year	38.316
2	Depreciation on land and building	0.000
3	Depreciation on machinery and vehicle	1.076
4	Depreciation on furnaces	0.000
5	Depreciation on moulds and fixtures	0.020
6	Depreciation on office equipment	0.100
7	Interest on long term loan @ 12%	1.354
8	Interest on short term borrowings@ 12%	0.324
9	Total cost of production	41.190

16. Turnover per year

SI	Item	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	Desiccated coconut	15000 kgs	240	36.00
2	Coconut milk	12500 litres	40	5.00
3	Coconut			3.00

	shell, fibre			
4	Total			44.00

17. Viability analysis

Sl	Description	Value
1	Net profit before income tax (Rs. lakhs)	2.810
2	Net profit ratio	6.4%
3	Internal rate of return	15.7%
4	Break even percentage	67%
5	Debt service coverage ratio	1.967

List of machinery suppliers for Desiccated coconut powder

1. Sidvin Machineries Private Limited, 10, 3rd Stage, Industrial Suburb, Mysore, 570008, Karnataka.; Tel: 0821-2485822; Fax: 0821 - 2489564